



Use Of Rapid HIV Testing To Prevent Perinatal And Partner Transmission: Preconception Through Delivery

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Applying a Life Course to a Perinatal Health Framework

Dawn Misra, Holly Grason

- ❑ Perinatal encompasses both maternal and infant outcomes
 - ❑ Framework integrates perinatal health into a life span with multiple determinants
 - ❑ Prepares pregnancy planning and helps women be healthy prior to pregnancy
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Measurable outcomes:

- ☐ Prevention of partner transmission
 - ☐ Prevention of secondary transmission and of superinfection
 - ☐ Positive maternal health
 - ☐ Adequate prenatal clinic attendance
 - ☐ Prevention of perinatal transmission
 - ☐ Prevention of prematurity and of low birth weight
 - ☐ Prevention of PP depression
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Health Across the Lifecourse:

- ☐ Preconception counseling prior to pregnancy occurrence
 - ☐ Family planning integrated in HIV clinic
 - ☐ Rapid testing of partners in HIV clinic
 - ☐ Rapid testing of patients and partners in OB clinic
 - ☐ Integration of OB and HIV services
 - ☐ Rapid testing in the DR
 - ☐ Linkage into HIV care for newly diagnosed women and children
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Preconception counseling - planning a healthy pregnancy.

□ Prevent perinatal and partner HIV transmission

□ Assist with pregnancy planning.

- Fully informed about reproductive and general health

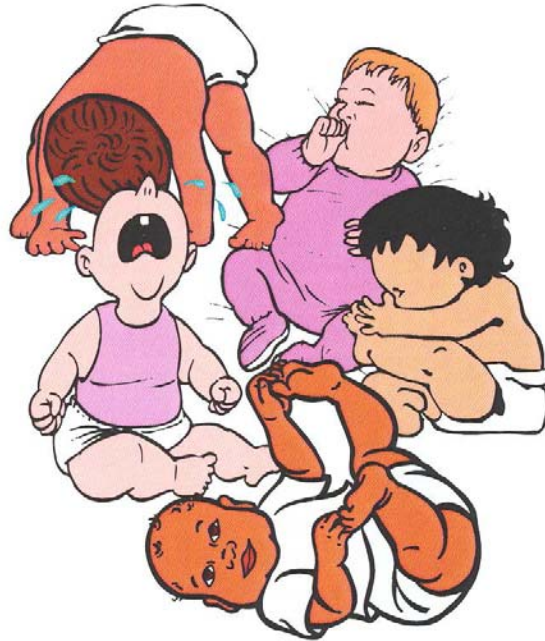
□ Enter pregnancy in good health, with a healthy immune system, with as few risk factors as possible.

- Begin ART early, treat infected partner, screen for STDs

- Cigarette smoke, drugs, alcohol, nutrition, folic acid

□ Fully informed about the use of antiretroviral therapies to prevent HIV transmission

Thinking about
having a



BABY?

p

Family planning integrated into HIV care

- ☐ Pregnancy Planning
 - ☐ Birth Control Options
 - ☐ Testing and treatment of STDs
 - ☐ Risk Reduction strategies
 - ☐ **Rapid testing of partners**
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Every Woman – Every Visit

- ❑ At every visit ask pregnancy intentions.
 - ❑ What are you doing about this:
 - If desire pregnancy how are you optimizing your health and preventing transmission?
 - If you do not desire pregnancy what are you doing to prevent pregnancy and prevent transmission?
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Rapid testing in a Women's Care Center (FP/OB/GYN)

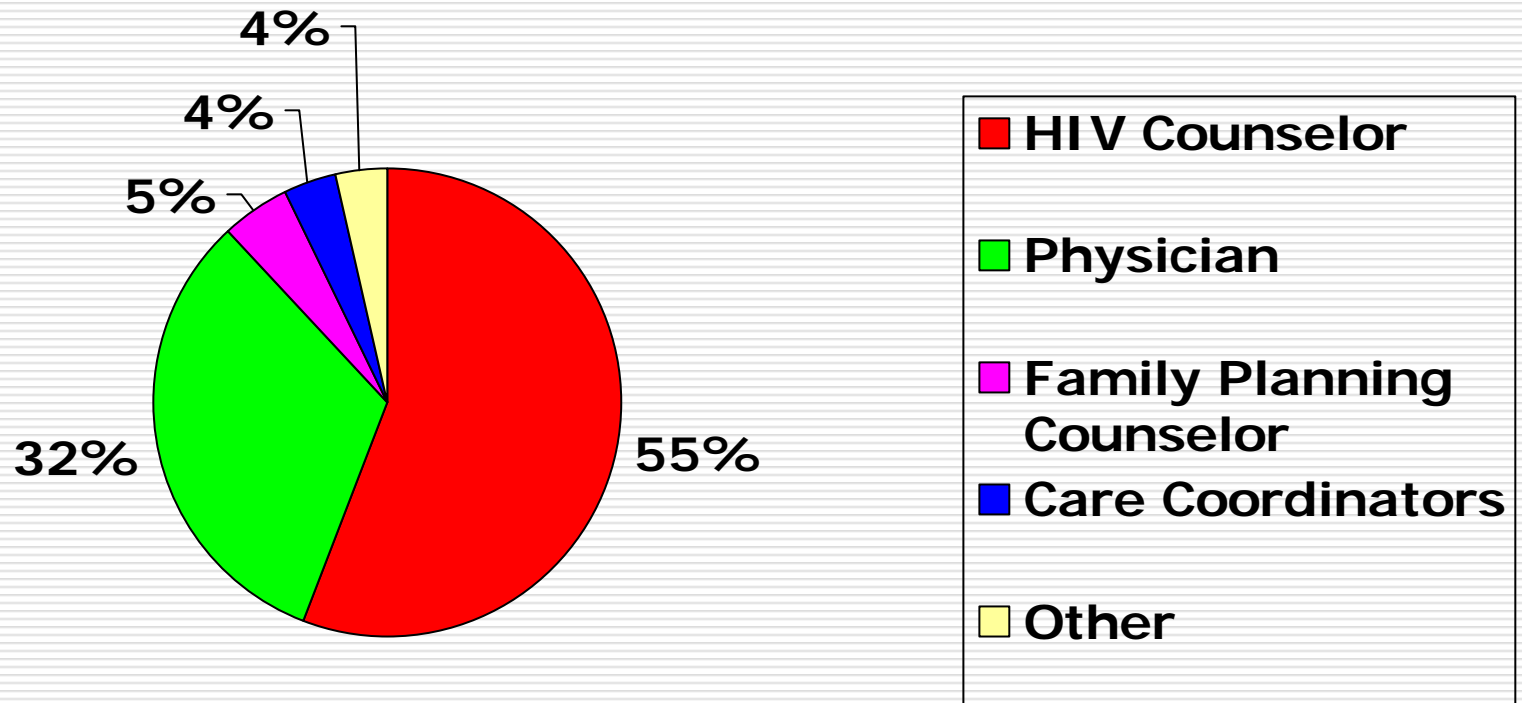
- ❑ Opt-out rapid HIV testing
 - ❑ Every pt who has not been tested within 6 months
 - ❑ Priorities:
 - Pregnant women
 - at intake
 - at 32 weeks
 - Patients requesting or symptomatic of STDs
 - Patients seeking pregnancy testing
 - **Partners**
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826 Rapid tests 9/03 – 2/05

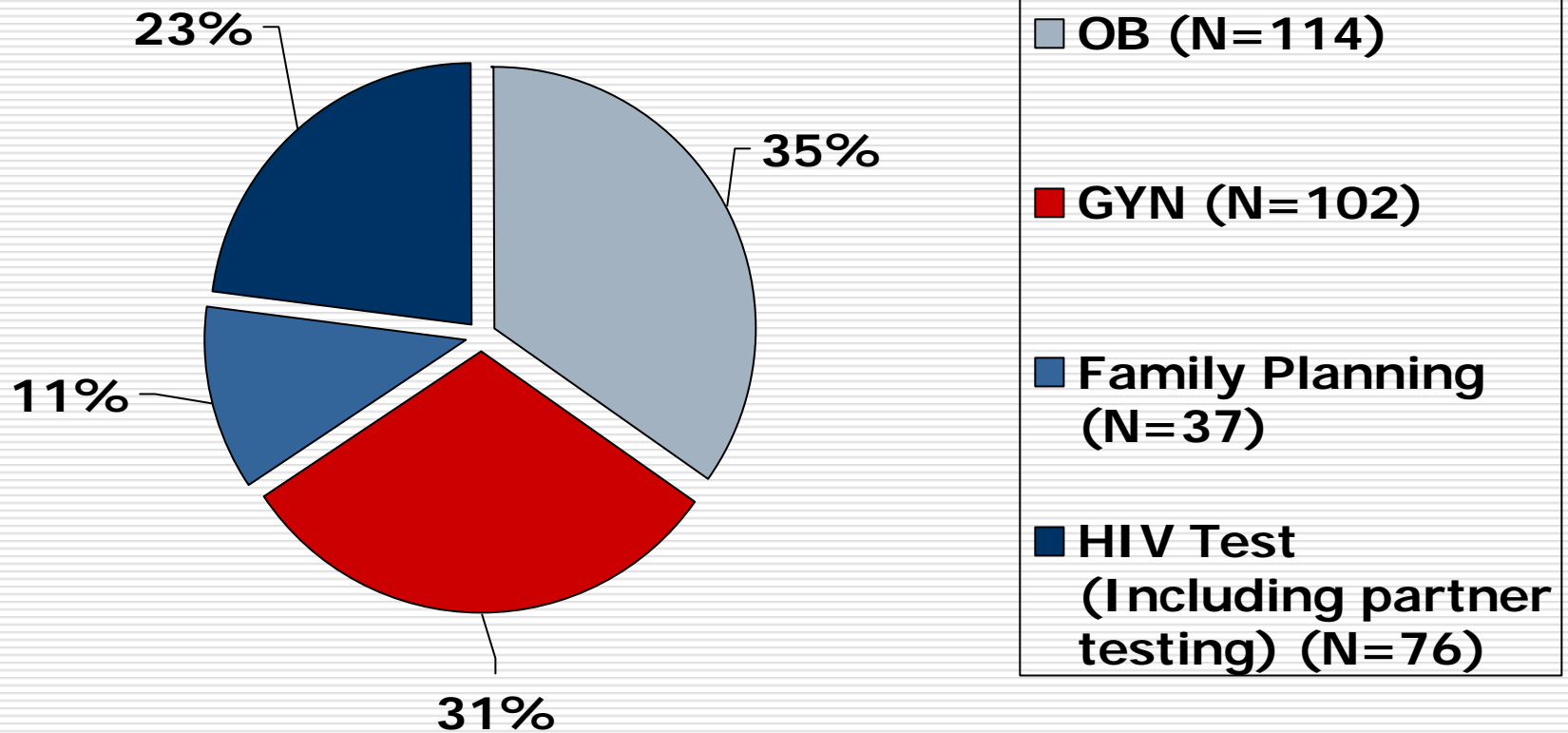
- ☐ 2 positive tests in non-pregnant patients
 - linked to HIV care on-site
 - ☐ 6 positive test in pregnant women
 - second and third trimester
 - all linked to on-site prenatal and HIV care
 - ☐ All infants HIV negative
 - ☐ 0 false positive test results
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Rapid HIV Testing by provider

Rapid HIV Test Offered By: (N=329)



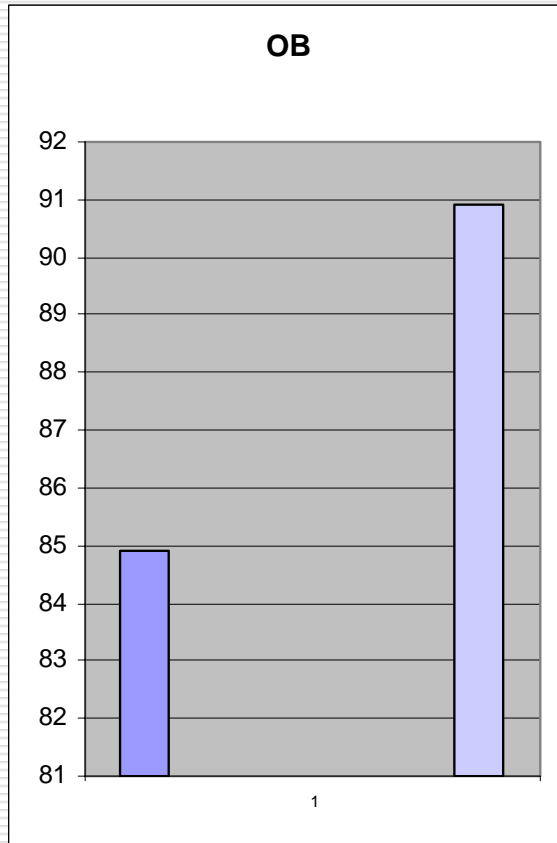
Reason for visit: 90% female, 10% male:



Evaluation of Rapid Testing program

- ☐ To determine if HIV testing had increased since rapid testing offered
- ☐ Started 9-03 (2 yrs)
 - Staff received HIV training
 - Rapid HIV implemented
- ☐ Did these two events increase HIV testing rates?

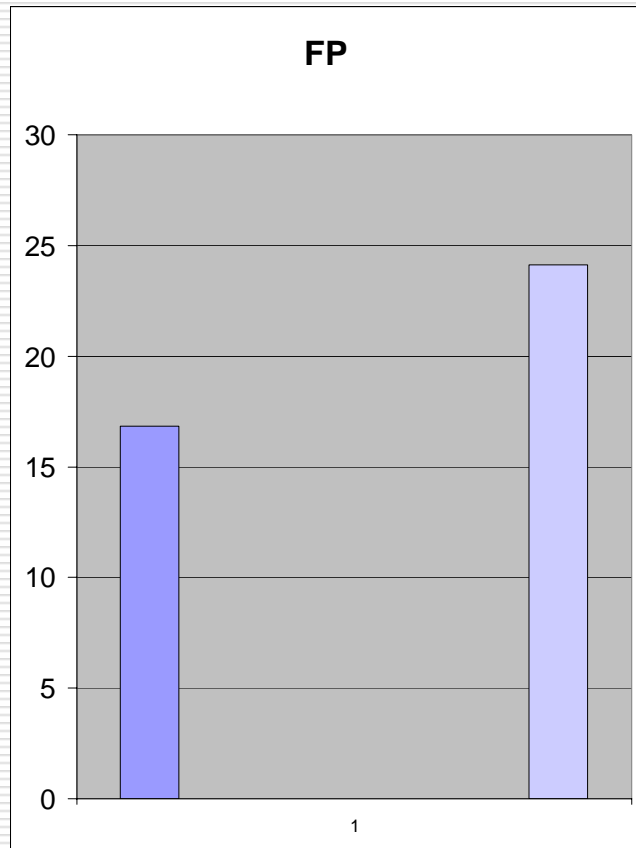
OB Chart Audit Results



□ Pre-Sept. 2003
rate ~ **85%**

□ Post-Sept. 2003
rate ~ **91%**

FP Chart Audit Results



□ Pre-Sept. 2003
rate ~ **17%**

□ Post-Sept. 2003
rate ~ **24%**

Our Challenges

- ❑ Labor-intensive startup process
 - ❑ Buy-in from staff at all levels: front desk, lab tech, medical ass., nursing, administrative and medical staff
 - Commitment to prioritize HIV testing
 - ❑ Challenges associated with implementing a new standard of care into a busy urban clinic setting
 - Clinic flow issues
 - ❑ Challenges that stem from collaboration of multidisciplinary team involving various departments and stakeholders
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Rapid Testing Successes

- High acceptance rate by patients
 - Opportunity to educate clinic staff, attendings and residents
 - “Think HIV”: Increased staff awareness of HIV and opportunity for capacity-building
 - “culture climate” change
 - Opportunity to deliver HIV prevention message for each client
 - Continually identifying new prevention needs: Muslim community; LGBT individuals; teens
 - **Next steps...**
Increased capacity-building, train staff to do rapid HIV testing
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32 Week Gestation Retest

- ❑ Primary HIV Infection in Pregnancy
- ❑ ACOG Committee Opinion
Nov. 2004
 - High prevalence areas
 - Women known to be high risk
 - Women who declined earlier testing

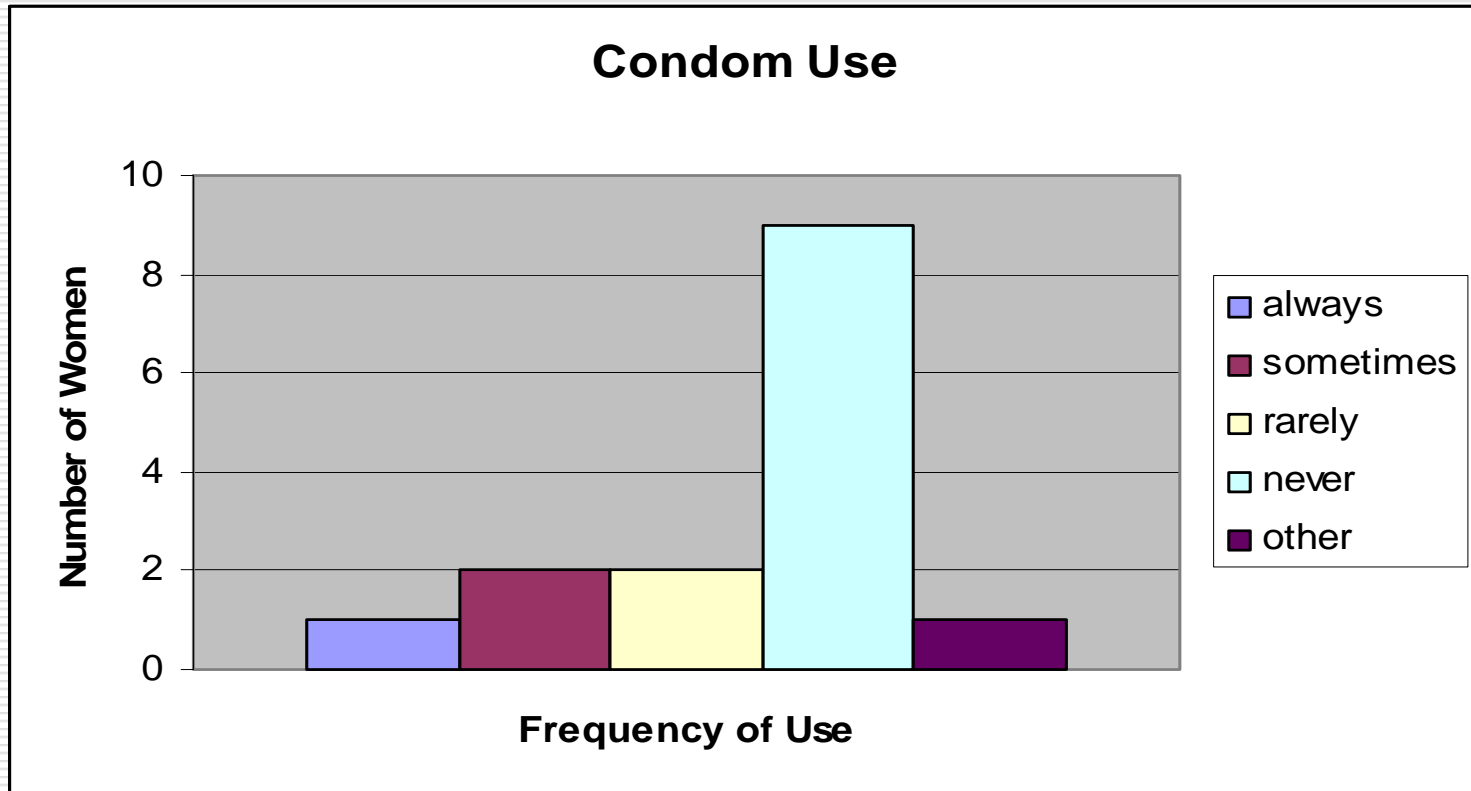


(CNN)

32 week re-test

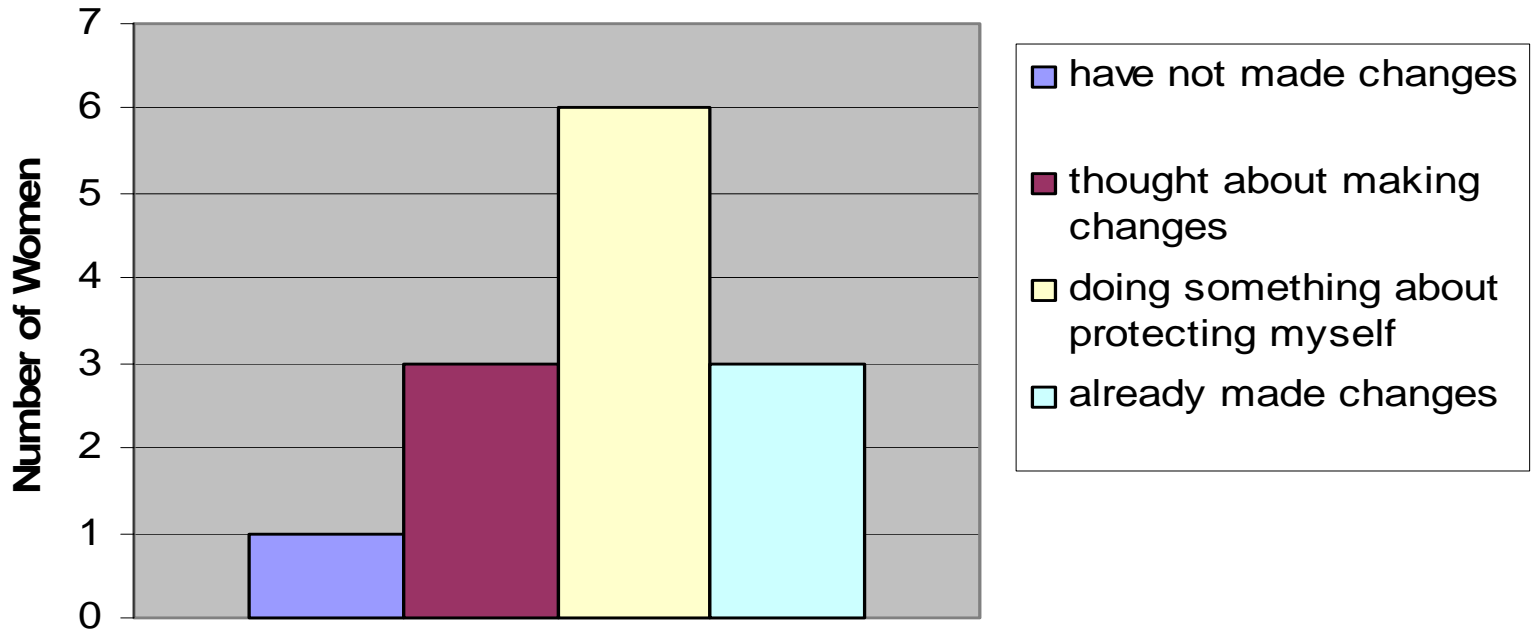
- ❑ 15 women offered retest, 4 declined
 - ❑ The age range of the women were 22-26 years of age
 - ❑ Condom use was not consistent among the patients during pregnancy
 - ❑ Majority of the patients felt that they were "committed to protecting themselves from HIV and doing something about it"
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Results

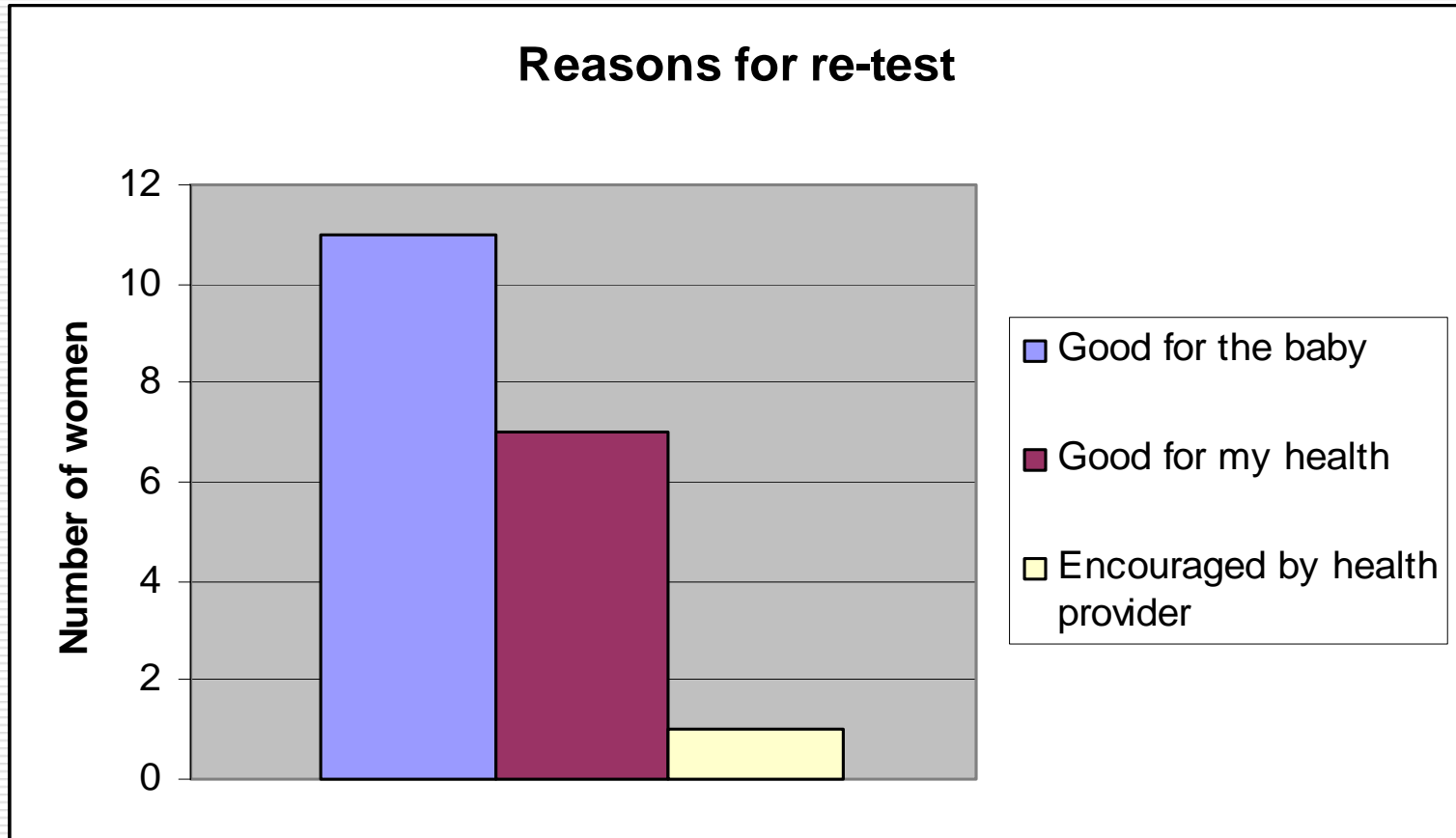


Results

Behavior Stages of Change



Results



Integration of OB and HIV services

- ❑ 0% Transmission Campaign
 - ❑ Educational Program monthly for “team”:
HIV team, OB/GYN, neonatology, pediatric clinic.
 - ❑ Two clinics a week dedicated to HIV pregnant patients.
 - Co-location of services.
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**You are
pregnant**



Now What???

Rapid testing in the DR of all unregistered and untested pregnant women in a non-research setting.

- Offer rapid HIV testing to all pregnant women who present to DR with unknown status (opt-out)
 - Applies to women who have inadequate prenatal care (<2 prenatal visits)
 - Goal is for all DR pts with undocumented HIV test
 - Train nurses, residents and doctors HIV testing counseling techniques for women in labor
 - Offer AZT IV to all women with HIV+ test results
 - AZT to infant within 24 hours of birth to all HIV+ test results even none given during labor
 - Expedited ELISA April 2002; Oraquick March 2005
 - 216 tests performed
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Rapid HIV Testing in Labor and Delivery @Hahnemann Hospital (4/29/02-3/6/05)

- ❑ **N=216** Rapid HIV Tests performed by Hahnemann Laboratory (68 expedited ELISA; 148 OraQuick)

 - ❑ **Demographics of patients tested:**
 - All patients had no or limited (<2 visits) prenatal care
 - 85% AA; 7% White; 8% Other/Unknown
 - 15-45 yrs old; mean age 27.41 years
 - 90% single; 10% married
 - 86% unemployed; 14% employed
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Rapid Test Turn-around Time (TAT): “Expedited” ELISA vs. OraQuick

Expedited ELISA utilized April 2002-Sept 2003:

- ❑ TAT ranged from **1:51** to **13 hours**.
- ❑ Median time 4 hours.
- ❑ **3%** of test results returned in <2 hours.
- ❑ **0%** of test results returned in <1 hour.

OraQuick 2005 data (thru March 05):

- ❑ TAT ranged from **21 minutes** to **6 hours**.
 - ❑ Median time 90 minutes.
 - ❑ **48%** of test results returned in <2 hours.
 - ❑ **19%** of test results returned in <1 hour.
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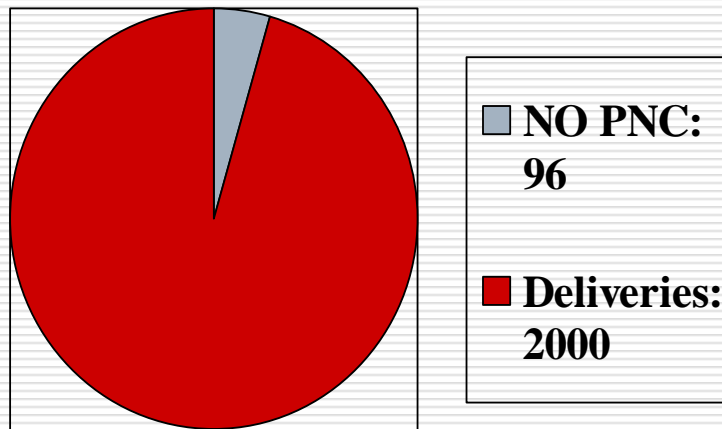
4/216 HIV+ results: 2% pos rate

- ❑ #1: Expedited ELISA - Post Partum
 - infant started AZT within 6 hours of birth
 - d/c'd after neg western blot
- ❑ #2: Oraquick- 32 weeks gestation
 - premature labor ceased
 - entered prenatal and HIV care
 - VL 32,000, HAART started
 - 36 wks gestation VL<50
 - AZT at delivery, vaginal deliver, infant
 - AZT x 6 weeks postpartum
 - Baby HIV-

HIV+ results

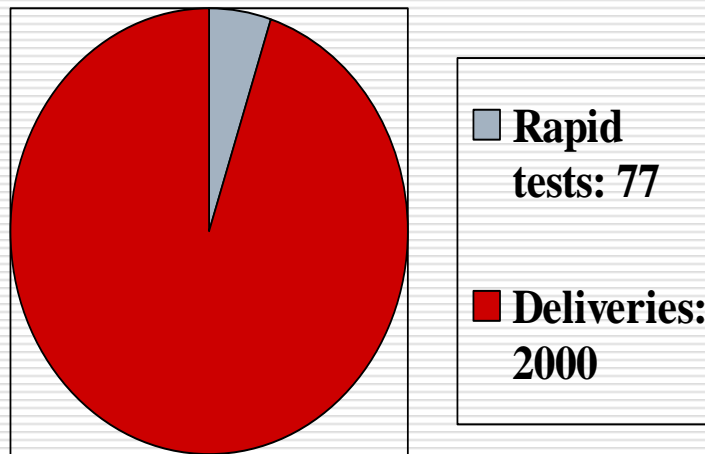
- ❑ #3: Oraquick at 38 weeks gestation
 - premature labor, C/S with AZT
 - AZT infant x 6 weeks postpartum
 - Baby HIV-
 - ❑ #4: Oraquick at 38 weeks
 - AZT IV, NVP, pt refused C/S after counseling.
 - AZT to infant X 6wks
 - + cocaine urine screen, pt's name falsified, open DHS case with 3 yr old, homeless
 - 24 hours DNA neg: four month test HIV+
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Projected number of No Prenatal Care Patients at HUH



4.8% of patients who deliver at HUH have had <2 prenatal visits: 96/2000.

Rapid Tests: Jan 2004 – Dec 2004



- 104 rapid tests done
- 5.2% of deliveries received rapid test: 104/2000

Linkage Into Care

- ☐ Before discharging baby from nursery:
 - AZT (zidovudine, Retrovir)
 - ☐ 2 mg/kg/dose every 6 hours for 6 weeks
 - ☐ Ensure mother has adequate supply
 - Primary care appointment with HIV specialist
 - ☐ Mom and infant
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